

What is claimed is:

1. A crystalline form of nateglinide (Form D) characterized by data selected from the group consisting of: an XRPD pattern with peaks at 6.6, 7.5, 13.1, 16.5, 17.4 and 21.1 ± 0.2 degrees 2θ ; and a DSC thermogram with endotherms at about 66 and 130°C.
2. The crystalline nateglinide of claim 1 characterized by an XRPD pattern with peaks at 6.6, 7.5, 13.1, 16.5, 17.4 and 21.1 ± 0.2 degrees 2θ
3. The crystalline form of claim 2, wherein the crystalline form has an XRPD pattern as substantially depicted in Figure 3.
4. A process for preparing the crystalline form of nateglinide of claim 1, comprising the step of contacting a nateglinide in the solid state with vapors of ethanol, wherein the nateglinide absorbs the vapors.
5. The process of claim 4, wherein the nateglinide contacted is Form H.
6. A process for preparing the crystalline nateglinide of claim 1 comprising the steps of:
 - a) preparing a solution of nateglinide in ethanol;
 - b) crystallizing the crystalline form from the solution; and
 - c) recovering the crystalline form.
7. A process for preparing the crystalline form of nateglinide of claim 1 comprising the steps of:
 - a) triturating a crystalline form of nateglinide in ethanol to obtain the crystalline form of claim 1; and
 - b) recovering the crystalline form of claim 1,with the proviso that the nateglinide triturated is not nateglinide Form U.
8. The process of claim 7, wherein the nateglinide triturated is nateglinide Form H.
9. A process for preparing crystalline nateglinide Form E comprising the step of storing nateglinide Form T for a sufficient time under a suitable temperature.
10. A process for preparing crystalline nateglinide Form E comprising the steps of:
 - a) preparing a solution in a mixture of toluene and methanol;
 - b) crystallizing nateglinide Form E from the solution; and
 - c) recovering the nateglinide Form E.
11. A process for preparing nateglinide Form E comprising the step of triturating nateglinide Form Z or delta in water for a sufficient amount of time to obtain nateglinide Form E.

12. A crystalline form of nateglinide (Form F) characterized by data selected from the group consisting of: an XRPD pattern with peaks at 4.8, 5.3, 15.2, 18.9 and 19.6 ± 0.2 degrees 2θ ; and a DSC thermogram with endotherms at about 53, 103 and 128°C.
13. The crystalline form of claim 12, wherein the crystalline form is characterized by an XRPD pattern with peaks at 4.8, 5.3, 15.2, 18.9 and 19.6 ± 0.2 degrees 2θ .
14. The crystalline form of claim 13, wherein the crystalline form has an XRPD pattern as substantially depicted in Figure 5.
15. A process for preparing the crystalline form of claim 12 comprising the steps of:
 - a) preparing a solution of nateglinide in n-propanol;
 - b) crystallizing the crystalline form from the solution; and
 - c) recovering the crystalline form.
16. A process for preparing crystalline form of nateglinide of claim 12 comprising the step of triturating a crystalline form of nateglinide in n-propanol.
17. A crystalline form of nateglinide (Form G) characterized by data selected from the group consisting of: an XRPD pattern with peaks at 14.4, 15.3, 19.3 and 20.3 ± 0.2 degrees 2θ and a DSC thermogram with endotherms at about 106 and 127°C.
18. The crystalline form of claim 17, wherein the crystalline form is characterized by an XRPD pattern with peaks at 14.4, 15.3, 19.3 and 20.3 ± 0.2 degrees 2θ .
19. The crystalline form of claim 18, wherein the crystalline form has an XRPD pattern as substantially depicted in Figure 6.
20. A process for preparing the crystalline form of claim 17 comprising the steps of:
 - a) preparing a solution of nateglinide in iso-propyl alcohol;
 - b) crystallizing the crystalline form from the solution; and
 - c) recovering the crystalline form.
21. A process for preparing the crystalline form of claim 17 comprising the steps of:
 - a) triturating a crystalline form of nateglinide in iso-propyl alcohol to obtain the crystalline form of claim 17; and
 - b) recovering the crystalline form of claim 17
22. The process of claim 21 wherein the nateglinide triturated is Form H.
23. A process for preparing nateglinide of claim 17 comprising the steps of:
 - a) preparing a solution of nateglinide in a mixture of isopropanol and water;
 - b) seeding the solution with nateglinide Form B at a temperature of from about 25°C to about 35°C;

- c) stirring the solution;
 - d) cooling the solution to a temperature of about minus 5°C to about 5°C to obtain a slurry;
 - e) stirring the slurry; and
 - f) recovering the nateglinide of claim 17 from the slurry.
24. A crystalline form of nateglinide (Form I) characterized by data selected from the group consisting of: an XRPD pattern with peaks at 5.5, 7.4 and 16.8 ± 0.2 degrees 2θ ; and a DSC thermogram with endotherms at about 46 and 121°C.
25. The crystalline form of claim 24, wherein the crystalline form is characterized by an XRPD pattern with peaks at 5.5, 7.4 and 16.8 ± 0.2 degrees 2θ .
26. The crystalline form of claim 25, wherein the crystalline form has an XRPD pattern as substantially depicted in Figure 7.
27. A process for preparing the crystalline nateglinide of claim 24 comprising the step of triturating a crystalline form of nateglinide in n-butanol, with the proviso that the nateglinide triturated is not Form U.
28. The process of claim 27, wherein the nateglinide triturated is Form H.
29. A process for preparing the crystalline form of claim 24 comprising the steps of:
- a) preparing a solution of nateglinide in n-butanol;
 - b) crystallizing the crystalline form from the solution; and
 - c) recovering the crystalline form.
30. A crystalline form of nateglinide (Form O) characterized by data selected from the group consisting of: an XRPD pattern with peaks at 4.4, 5.2, 15.7 and 16.6 ± 0.2 degrees 2θ and a DSC thermogram with endotherms at about 106, 126 and 137°C.
31. The crystalline form of claim 30, wherein the crystalline form is characterized by an XRPD pattern with peaks at 4.4, 5.2, 15.7 and 16.6 ± 0.2 degrees 2θ .
32. The crystalline form of claim 31, wherein the crystalline form has an XRPD pattern as substantially depicted in Figure 13.
33. The crystalline form of claim 30, wherein the crystalline form is stable when heated to a temperature of about 60°C for about 8 hours.
34. A process for preparing the crystalline form of claim 30 comprising the step of contacting a nateglinide in the solid state with vapors of methanol to obtain the crystalline form, wherein the nateglinide absorbs the vapors.
35. The process of claim 34, wherein the nateglinide contacted is Form H.

36. A crystalline form of nateglinide (Form T) characterized by an XRPD pattern with peaks at 7.2, 7.9, 8.3 and 10.7 ± 0.2 degrees 2θ and a DSC thermogram with endotherms at about 68, 106 and 130°C .
37. The crystalline form of claim 36, wherein the crystalline form is characterized by an XRPD pattern with peaks at 7.2, 7.9, 8.3 and 10.7 ± 0.2 degrees 2θ .
38. The crystalline form of claim 37, wherein the crystalline form has an XRPD pattern as substantially depicted in Figure 16.
39. A process for preparing the crystalline form of claim 36 comprising the steps of:
- tritulating a crystalline form of nateglinide in methanol to obtain the crystalline form of claim 36, with the proviso that the nateglinide tritulated is not Form U; and
 - recovering the nateglinide Form T.
40. The process of claim 39, wherein the nateglinide tritulated is Form H.
41. A crystalline nateglinide in the form of a methanol solvate represented by the formula NTG-1/4 MeOH (wt/wt).
42. The crystalline nateglinide of claim 41, wherein the crystalline form is nateglinide Form O methanol solvate.
43. A crystalline nateglinide in the form of a methanol solvate characterized by containing more than about 20% methanol by weight.
44. The crystalline nateglinide of claim 43 wherein the nateglinide is nateglinide Form T methanol solvate.
45. A crystalline nateglinide in the form of an ethanol solvate represented by the formula NTG-3/2 EtOH (wt/wt).
46. The crystalline form of claim 45 wherein the crystalline form is nateglinide Form D ethanol solvate.
47. A crystalline nateglinide monoipanolate.
48. The crystalline nateglinide of claim 47 wherein the monoipanolate is nateglinide Form G.
49. A crystalline nateglinide in the form of n-butanol solvate.
50. The crystalline nateglinide of claim 49, wherein the crystalline form is Form I n-butanol solvate.
51. A crystalline nateglinide in the form of an n-propanol solvate.
52. The crystalline nateglinide of claim 51, wherein the solvate contains about 16% to about 24% n-propanol.

53. The crystalline nateglinide of claim 52, wherein the solvate is Form F n-propanol solvate.
54. A pharmaceutical formulation for administration to a mammal comprising a crystalline form of nateglinide selected from the group consisting of D, F, G, I, O and T, and a pharmaceutically acceptable excipient.
55. A method for lowering blood sugar level of a mammal comprising administering the pharmaceutical formulation of claim 54 to the mammal.